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SOME SUGGESTIONS ON THE PREPARATION OF MANUSCRIPTS

Attention of writers and typists to a few simple points in the preparation of manuscripts may help much in economy of time on the part of editors, compositors, and others who later have to deal with the manuscripts. Some suggestions, heretofore offered in special cases, are here repeated for wider circulation.

Manuscripts for the editor or printer should be the FIRST SHEETS (not carbon copies), and these will hereafter be required. The paper used for carbon copies is not substantial enough to endure the hard treatment generally suffered by manuscripts, and the carbon print is difficult to read and is readily obliterated in editing.

All the matter typed should be double-spaced, including the headings, "Literature Cited," tables, etc., and this rule applies equally well to matter submitted for the Bureau News Letter. A little compression may be desirable, if it is a case of getting a paragraph entirely into a page, or of other emergency.

A margin of at least an inch should be left on each side of the text.

All center heads should be typed in capitals, and should not be underscored.

After completing a paragraph, do not begin another on the same page unless there is room for the entire paragraph. In other words, do not divide a paragraph between two pages, except in the rare case that a single paragraph is too long for an entire page. Observance of this precaution facilitates the distribution of a manuscript among the compositors, and promotes resultant speed in printing.

Do not combine text and tables on the same page. Tables go to a special compositor. Bring a paragraph to a close at the point where the table is to be inserted, and continue with a new paragraph, on a new page. Then number all the pages consecutively, including tables, in their proper position.

Do not run horizontal lines between successive lines of figures in tables. Horizontal lines specially needed will be supplied. Worth-while information on the construction of tables may be obtained by studying the tables in almost any Technical Bulletin, or, perhaps better, in the Journal of Agricultural Research.

TAXONOMIC INVESTIGATIONS

S. A. Rohwer, Senior Entomologist, in Charge

A. B. Gahan returned to Washington on January 16 after four months spent in Europe studying in the various museums. The purpose of the visit was to study types of Chalcidoidea in a number of the old collections of Europe, notably the Förster, Gustav Mayr, Ratzeburg, Walker, and Westwood collections. The greater part of Mr. Gahan's time was spent in the British Museum of Natural History, but he also visited the Hope Museum at Oxford, the Musée National d'Histoire Naturelle at Paris, the Naturhistorisches Museum at Vienna, the Forstliche Hochschule at Eberswalde, the Deutsches Entomologisches Institut at Dahlem, and the Zoologisches Museum der Universität at Berlin. Many interesting notes and a large number of specimens which have been compared with types were secured.

Dr. H. W. Allen and H. A. Jaynes, of the Japanese Beetle Investigations Laboratory at Moorestown, N. J., visited the Taxonomic Division on January 30 and 31 for the purpose of conferring with Mr. Gahan regarding the identity of a number of parasitic wasps which are being introduced from the Orient to combat the Japanese beetle. While he was in Europe, Mr. Gahan compared specimens with types of Oriental Tiphia in the British Museum and made notes for the use of Dr. Allen and Mr. Jaynes.

Dr. J. M. Aldrich, who has been ill with appendicitis for several weeks, returned to his office on the afternoon of January 31.

Dr. E. D. Ball, former Director of Scientific Work of the Department, and now located in Sanford, Fla., spent several days in the Division of Insects studying Homoptera.

Dr. J. W. Folsom, of the Cotton Insects Field Laboratory at Tallulah, La., was a visitor in the Division on January 27, and left for identification many lots of insects collected by airplane.

S. E. Crumb, of Clarksville, Tenn., spent the last week of January working on noctuid larvae in the Museum collections.

R. J. Sim, of the Japanese Beetle Laboratory, Moorestown, N. J., spent about a week in the latter part of the month making drawings of the genitalia of species of Phyllophaga in the Coleoptera collections of the Museum.

F. E. Wilson, graduate student at Harvard University, visited the Division in the early part of the month to discuss taxonomic work on the genus *Scymnus*. Mr. Wilson is planning work on a taxonomic revision of *Scymnus* of North America.

H. C. Hallock, of Westbury, Long Island, N. Y., spent January 9 to 14 in the Division, working on the species of the genus *Cryptomeigenia*

which occur in the United States. This is a group of some economic importance, as it is parasitic on May beetles.

C. H. Curran, of the Canadian Entomological Branch, spent from the 1st to the 9th of January studying types of muscoid flies in the Museum collection.

Dr. W. A. Hoffman, of the School of Tropical Research in Porto Rico, visited the dipterists in the Division on January 3.

George M. Greene, of Harrisburg, Pa., visited his brother, C. T. Greene, on January 4, and spent some time looking up literature for his index of Coleoptera.

Prof. Robert Matheson, of Cornell University, was a visitor to the Division on January 4, to discuss some flies parasitic on birds, which he had sent in for identification.

R. C. Shannon left Washington on January 23 for New York, and from there he sailed on January 26 for South America. He will spend six months in Peru making a study of the disease verruca for the International Health Board.

L. E. Dills, of the University of West Virginia, arrived at the Museum on January 19 and is spending several weeks in the Division, working on the bees of West Virginia, under the direction of Miss Sandhouse.

COTTON-INSECT INVESTIGATIONS

B. R. Coad, Entomologist, in Charge

In the latter part of January B. R. Coad visited Washington to confer with Bureau officials regarding the work on cotton insects. On his way to Washington he spent a day in conference with Prof. H. W. Barre, at Clemson College, S. C.

Dr. J. W. Folsom, of the Delta Laboratory, accompanied Mr. Coad to Washington. While there he conferred with a number of Bureau specialists, and spent some time studying foreign insects in the collections at the Museum.

On January 24 and 25 E. W. Dunnam, of the Florence, S. C., field laboratory, met Mr. Coad and others in Washington for a conference on the work on cotton insects.

Dr. F. A. Fenton, of the El Paso, Tex., field laboratory, spent a few days at Tallulah in the latter part of January, in conference regarding the pink bollworm situation in the Southwest.

TRUCK-CROP INSECT INVESTIGATIONS

J. E. Graf, Senior Entomologist, in Charge

Dr. B. L. Richards, pathologist of the Utah Experiment Station, at Logan, visited the Bureau in the first week in January and discussed the injury caused to potatoes by Paratricoza cockerelli (Sulc.), an injury which indicated the transmission of a disease.

B. L. Boyden, Tampa, Fla., visited the Bureau January 6, where he discussed plans for closing the laboratory at Tampa preparatory to his transfer to the Federal Horticultural Board. After this transfer has been made he will give his attention to eradication of the date scale in the southwestern part of the United States.

A. C. Morgan and S. E. Crumb, of the field laboratory at Clarksville, Tenn., visited the Bureau January 12 to discuss the readjustment of projects in connection with investigations of tobacco insects. Mr. Crumb remained in Washington until the end of January to do some museum and library work.

Dr. F. W. Pcos, of the Virginia Truck Experiment Station, at Norfolk, visited the Bureau January 16 and 17, and discussed his work on the potato tuber moth.

In the second week in January Walter Carter, in charge of the field laboratory at Twin Falls, Idaho, visited Logan, Utah, where he made arrangements with the Utah Experiment Station for the continuance of the investigations of the sugar beet leafhopper. Mr. Carter then visited several points in California. At Riverside on January 16 and 17 he discussed with Messrs. Carsner and Shapovalov the problem of disease resistance, and with Prof. Harry S. Smith, of the California Experiment Station, the matter of parasite introduction. At Spreckels he discussed with G. E. Bensele the ecology and control work of the sugar beet leafhopper in California. At Berkeley he conferred with Dr. H. H. P. Severin, of the University of California, on the forthcoming cooperative expedition to Mexico and the islands off the coast of California in search of parasites of the sugar beet leafhopper. Mr. Carter also discussed with Doctors Swezey and Severin the work connected with the search for a causal organism of curly top of sugar beets.

Dr. E. D. Ball, in charge of the celery leaf-tyer investigations for the Florida State Plant Board, at Sanford, visited the Bureau January 27, when problems connected with the studies of the celery leaf-tyer were reviewed.

R. E. McDonald, Entomologist of the Texas Department of Agriculture, Austin, visited Washington January 27 to 30. Although his principal interests were concerned with the Federal Horticultural Board's discussions of the pink boll worm, he found time to visit the Division of Truck-Crop Insect Investigations and discuss the problem of the sweet potato weevil in Texas.

GIPSY MOTH AND BROWN-TAIL MOTH INVESTIGATIONS

A. F. Burgess, Senior Entomologist, in Charge

R. T. Webber will remain at the gipsy moth laboratory during the present season to continue certain biological and systematic studies relating to the parasitic Diptera. In the preceding five years he has made five trips to Europe and Africa, each of about six months' duration, for the collection of parasites.

Raymond Evans, Chief, and G. R. Goergens, Administrative Assistant, of the Office of Motion Pictures, spent several days in New England about the middle of November, making motion pictures of the work of inspecting Christmas trees to prevent the spread of the gipsy moth.

S. S. Crossman spent the first ten days of December in Washington conferring with Bureau officials, and assisting in the arrangement of three new motion-picture reels of the gipsy and brown-tail moths. These reels should be available early in March.

A. F. Burgess spent a few days in Washington in December, conferring with Bureau officials.

A. F. Burgess and C. W. Collins attended the meetings of the American Association of Economic Entomologists, December 27 to 30, at Nashville, Tenn.

On January 4, 1928, A. F. Burgess addressed the tree wardens and moth superintendents at the meetings, in Worcester, Mass., of the Massachusetts Tree Wardens' and Foresters' Association.

Two shipments of the golden oak scale, parasitized by what appears to be Habrolepis dalmanni, have recently been sent from Melrose to Dr. R. J. Tillyard, of New Zealand, where this scale is causing great damage to the trees.

CEREAL AND FORAGE INSECT INVESTIGATIONS

W. H. Larrimer, Senior Entomologist, in Charge

C. C. Hill and H. D. Smith, of the Carlisle, Pa., field laboratory, attended the fifth annual meeting of the Entomological Society of Pennsylvania at Harrisburg January 17. Mr. Hill spoke on the present status of the Hessian fly in Pennsylvania. He was elected President for the coming year, and Dr. E. H. Dusham, head of the Department of Entomology and Zoology, Pennsylvania State College, was elected Secretary.

Dr. W. J. Phillips, in charge of the Charlottesville, Va., field laboratory, was in Washington on January 27, consulting with Bureau officials.

INVESTIGATIONS OF INSECTS AFFECTING MAN AND ANIMALS

F. C. Bishopp, Senior Entomologist, in Charge

Dr. Robert Matheson, of Cornell University, visited the Bureau on January 5 for conference on the program of the International Congress of Entomology, to be held at Ithaca, N. Y., next summer.

On January 5 Prof. Geo. A. Dean, of the Kansa. Agricultural College, conferred with Mr. Bishopp regarding certain work on external parasites of livestock which is under way at that institution.

On January 10 and 11 E. W. Laake, of the Dallas, Tex., field laboratory, delivered two addresses to the farmers attending the special Livestock Short Course held at College Station, Tex. The screw worm and its control, and the cattle grub as a source of loss to livestock raisers, were the two principal problems discussed.

On January 13 and 14 F. C. Bishopp and Prof. L. I. Case, of the Virginia Polytechnic Institute, visited Burkes Garden, Va., to arrange for the season's cooperative work on control of the cattle grub, which is under way in Burkes Garden.

JAPANESE BEETLE INVESTIGATIONS

Loren B. Smith, Senior Entomologist, in Charge

Curtis P. Clausen, who has been in charge of the foreign phases of the parasite work on the Japanese beetle, recently returned from India, where he has been collecting and rearing parasites during the past three years.

M. C. Swingle has been granted leave of absence to take up a special course in chemistry during the winter quarter at Ohio State University. He will return to the laboratory early in March.

H. C. Hallock, stationed at Westbury, Long Island, who is conducting an investigation of Anomala orientalis, recently visited the Moorestown office.

J. L. King attended the annual meeting of Pennsylvania workers in economic entomology, held at Harrisburg January 17, and gave a brief talk on parasites of the Japanese beetle.

Dr. B. A. Porter, Vincennes, Ind., visited this laboratory in December and discussed plans for future work in connection with investigations of the codling moth.

L. C. McAlister, who is engaged in studying new stomach and contact poisons for the codling moth at this laboratory, attended the meetings of the American Association of Economic Entomologists at Nashville, Tenn., in holiday week.

The removal of the research divisions of the Japanese beetle project from Riverton to Moorestown, N. J., is about completed.

During the winter months three shipments of parasites were received at the Moorestown laboratory. All of these were Tiphia wasps in the cocoon stage, reared from ovipositions obtained on Popillia grubs at the different field laboratories. From Shillong, India, 9,000 cocoons of Tiphia No. 2036, a large percentage of which were affected by fungus, were received in November. From Miho, Japan, 5,000 cocoons of Tiphia No. 1851, in very good condition, and 700 cocoons of Tiphia No. 5, from Suigen, Korea, which were largely attacked by fungus, arrived in December. From Pennin, China, 9,000 cocoons of Tiphia No. 115 arrived in January in very good condition.

STORED-PRODUCT INSECT INVESTIGATIONS

E. A. Back, Senior Entomologist, in Charge

On January 25 A. O. Larson and C. K. Fisher moved headquarters for the bean weevil investigations from Alhambra to 1218 I Street, Modesto, Calif.

At the request of Director Eagle Stillwater, Dr. Back attended the Seventh Furniture Institute at Grand Rapids, January 16 to 21, and gave an illustrated talk on insect damage to furniture.

By request, Dr. R. T. Cotton was present as an official observer at the fumigation of a large candy establishment in Chattanooga, Tenn., January 20 to 22.

Perez Simmons and W. D. Reed attended the twentieth annual meeting of the Dried Fruit Association of California, held January 14 at Del Monte, Calif. Mr. Simmons read a paper by Simmons and Reed, entitled "Methods of Fumigation in the Dried Fruit Industry." The Association voted to have the paper mimeographed for distribution among its members. At the request of the secretary of the Association, Mr. Simmons exhibited photographs of fumigable storage bins constructed during the past year and displayed a sample of a trap which it is hoped will prove useful in the coming season by lessening the abundance of dried-fruit beetles in fig orchards.

Harry Steiner, recently associated with D. B. Mackie, has severed his connection with the California State Department of Agriculture and about March 1 will go to Turkey, where he will be engaged in the fumigation of figs, in the interest of the National Biscuit Company.

BEE CULTURE INVESTIGATIONS

James I. Hambleton, Apiculturist, in Charge

Dr. Ragnar Frisch, of the University of Oslo, Norway, at present in this country under a Rockefeller fellowship, was a recent visitor at the Bee Culture Laboratory. P. E. Crane, of the firm of J. E. Crane and Son, commercial honey producers, of Middlebury, Vt., and Prof. L. E. Dills, of the University of West Virginia, were also recent visitors.

During the month of January E. L. Sechrist attended a series of meetings relating to beekeeping, which took him to the Pacific Coast. His schedule included meetings of various organizations, as follows: The Maryland Horticultural Society, at Baltimore, Jan. 3; Heart of America Beekeepers' Association, Kansas City, Mo., Jan. 14; Oklahoma Beekeepers' Association, Oklahoma City, Jan. 16 and 17; Arkansas Beekeepers' Association, Little Rock, Jan. 18 and 19; Southern States Conference, consisting of representatives from Oklahoma, Texas, Louisiana, and Arkansas, at Texarkana, Ark., Jan. 20 and 21; the annual meeting of the American Honey Producers' League, at San Francisco, Calif., Jan. 25 to 27; and a conference with marketing specialists, on honey grades, at San Francisco, Jan. 28. He made a visit to the Intermountain Bee Culture Laboratory at Laramie, Wyo., Jan. 31. His schedule also includes addresses to beekeepers attending the short course given by the University of Illinois at Urbana, Jan. 11 and 12, the short course during Farmers' Week at the Iowa State College of Agriculture, at Ames, on Feb. 2 to 4, and the short course at the Kansas State Agricultural College, Manhattan, on February 8 and 9.

Jas. I. Hambleton attended the meeting of the Oklahoma State Beekeepers' Association, at Oklahoma City, on Jan. 16 and 17, the meeting of the Arkansas State Beekeepers' Association, held at Little Rock on Jan. 18 and 19, and a conference of delegates representing beekeeping interests in Texas, Louisiana, Arkansas, and Oklahoma, held at Texarkana, Ark., on Jan. 20 and 21.

FOREST INSECT INVESTIGATIONS

F. C. Craighead, Senior Entomologist, in Charge

In the third week in January J. M. Miller visited the Prescott National Forest, in Arizona, to inspect the control operations against Dendroctonus barberi Hopk., which have been in progress there during the winter.

J. A. Beal reports that he has been in the field a considerable part of January making studies of the effect of a sudden drop in temperature in the latter part of December on broods of the southern pine beetle. He states that everywhere there seems to be very high mortality of all stages except the egg.

DECIDUOUS-FRUIT INSECT INVESTIGATIONS

A. L. Quaintance, Associate Chief of Bureau, in Charge

E. J. Newcomer, in charge of the field laboratory at Yakima, Wash., was in Washington January 4 to 14, discussing his investigations with Bureau officials. While on his return trip to the Pacific coast he made a short stop at the field laboratory at New Orleans, La., devoted to the investigation of the camphor scale and other citrus pests.

A. J. Ackerman, in charge of the field laboratory at Bentonville, Ark., was in Washington January 4 to 14 discussing his investigations with Bureau officials. On his return trip he accompanied Mr. Newcomer on the latter's visit to the laboratory in New Orleans, as related in the foregoing paragraph.

Dr. B. A. Porter, in charge of the field laboratory at Vincennes, Ind., and R. F. Sazama, associated with Dr. Porter at the same laboratory, were in Washington several days in the early part of January to confer regarding plans for work on the codling moth, to be conducted at Vincennes in the coming season.

E. R. Van Leeuwen, engaged in Japanese beetle investigations at Moorestown, N. J., attended the codling moth conference in Washington January 4.

LIBRARY

Mabel Colcord, Librarian

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